

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

BAUM et al.

Application No.: 09/630,752

Filed: August 2, 2000

For: Photographic Image Upload Kiosk
and Method

Examiner: Garg

Art Unit: 3625

**AMENDED PPELLANT'S APPEAL
BRIEF**

IN RESPONSE TO Office Communication
Mailed 5/22/2007

Mail Stop Appeal Brief - Patents
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313

Sirs:

In response to the Office Communication Mailed 5/22/2007, each of the independent claims in the "Summary of Claimed Subject Matter" has been separately discussed. Supports in the specification to the elements in the independent claims have been described. Every means plus function and step has been identified.

This Brief is presented in support of a Notice of Appeal filed herewith, from the rejection of Claims 1-64 of the above-identified application, as set forth in the Final Office Action mailed July 26, 2005.

REAL PARTY OF INTEREST

The Real Party of Interest is Shutterfly Inc., a Delaware corporation.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

STATUS OF CLAIMS

Claims 1-64 are pending and are the subject of this Appeal. All claims have been rejected. Claims 1-64 are the subject of this appeal. No other claims are pending.

STATUS OF AMENDMENTS

The claims were amended in response to an Office Action mailed in December 3, 2003. A Final Office Action was mailed on July 26, 2005.

A copy of all the pending claims, prior to the after final amendment, is provided in Appendix A attached hereto.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention provides apparatus and methods for accepting and storing image data from each one of a plurality of customers, for example at a kiosk, then transferring and again storing the digital image data to a central processing facility for processing and distribution per instructions from the customer.

Figure 1 and related discussions on page 7-8 of the instant application disclose a kiosk 100 that includes one or more user stations 200. Each user station 200 can include a display 110, user input device 120, image-input device(s) 130 and/or 140, and/or payment input device. A user or customer 99 can input images into the kiosk, enter user-identification information (such as name, address, telephone number, e-mail address, and/or credit card information) into the kiosk, and then order products and/or services based on the images (such as prints, slides, enlargements, photo-CDROMs, e-mailed images, etc.). The kiosk 100 includes local storage 320 within the kiosk or nearby, onto which the image and order information is stored. Information for a plurality of customers 99 can be stored, and then uploaded periodically during the day or overnight to a central repository and image-processing facility. That central image-processing facility can make products or perform services, and delivers the result to the customer.

Figure 2 and related discussions on page 8-9 of the instant application disclose a kiosk user interface that includes display 110, user input device 120, image-input device(s) 130 and/or 140, and/or payment input device 150. Display 211 displays such user-identification information as name, address, telephone number, e-mail address, and/or credit-card payment information. Alternatively, the user-id might just show an arbitrary customer-id number, in order that privacy is maintained. For example, a customer would enter their personal information just once, and thereafter use their customer-id number. In other embodiments, the customer's credit card is scanned by scanner 150 to provide both the customer-id number as well as providing credit information and a way of providing payment. In some embodiments, user data input device 120 (such as a QWERTY-type keyboard or a joystick-type pointing device) is used to input user-identification information. Image input interface 140 includes one or more digital interfaces (such as one or more USB (universal serial bus) ports 241, 242, a firewire-type port 248, storage card readers 243 and 244 of various types, hard-disk readers 245, and/or other data interfaces 246) in order to be able to accept digital image information from user 99. Picture scanning interface 130 provides scanning of film or other images for some embodiments.

In some embodiments, undeveloped film canisters or containers (such as advanced film process (AFP) or 35 mm containers) are pushed into openings 138 and 135, whereupon the film is extracted in a dark sealed interior compartment and developed to produce a developed film strip, which is then scanned by a high-resolution digital scanner to generate digital images. In some embodiments, negatives are inserted into slot 131, whereupon the film is optionally cleaned using air blowers and/or solvents, and then scanned by a high-resolution digital scanner to generate digital images. In some embodiments, prints are inserted into slot 132, whereupon the picture is optionally cleaned using air blowers and/or solvents, and then scanned by a high-resolution digital scanner to generate digital images. Other embodiments include other scanners. The images, once entered, are displayed as small "thumbnail" images in window 214 on display 110 in some embodiments. This allows the user 99 to enter order information (e.g., specifying the type, size and number of prints to be made of each image) which is then shown in window 212. In some embodiments, as each successive thumbnail image is highlighted, an enlarged view of that image is shown in window 213. In some embodiments, the user can optionally specify custom modifications to be made to each image (such as cropping, color adjustment, red-eye removal, special borders, etc.). Further, back-print information can optionally be entered, which will be printed on the back of every print and/or just certain prints. In some embodiments, special delivery instructions can be entered, for example, specifying that a certain number and type and size of prints of certain images are to be mailed to each of a plurality of different addresses (e.g., one print of everything to be mailed to Mom at address 1, two enlargements of print 3 to be mailed to Aunt Maureen at address 2, etc.).

Additionally, Figure 3 shows a block diagram of a kiosk information handling system 300. Figure 4 shows a block diagram of a kiosk computer upload system 400.

Figure 5 shows a method for the kiosk including accepting image information from a user at a first business location (for example, at a kiosk 100), accepting user-identifier information and, in some embodiments, order information associated with the image information at the first business location, displaying one or more of the images modifying one or more of the images, processing and digitally storing a plurality of digital images from the image information at the first business location, transferring the digital stored images to a second business location across a communications medium

(e.g., some embodiments include being polled from block 515 (a poll sent from a central location), and then uploading the digital images across an internet connection), storing the digital images at the second business location (e.g., into a mass storage device at the processing facility), and processing 520 prints of the stored images (e.g., making prints of the images onto photographic paper), and block 522 shows delivering the processed prints to a customer (e.g., mailing the prints).

CLAIM 1

Regarding claim 1, Figures 1 and 2 illustrate a method of collecting images from a plurality of customers into a kiosk, and transferring images from the kiosk to an image-processing provider. The kiosk includes a computer, a data storage device and an interface for capturing digital images. The data storage device includes computer readable media for storing information representative of the digital images. Figures 1-5 and related discussions disclose that image information can be accepted from a customer into the interface of the kiosk (step 510, Figure 5). User-identifier information can be accepted into the computer; order information can be accepted into the computer (step 512, Figure 5). A digital representation (step 530, Figure 5, and e.g. the digital images scanned from negative films and their associated thumbnail images) of the image information and associated user identifier information and order information for each of a plurality of different customers into a data structure can be stored into a local storage connected to the computer. In response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, data structure address information corresponding to the available data structure can be sent from the kiosk to the image-processing provider via the communications medium (step 515, Figure 5; Page 16 Lines 20-29). In response to receipt of the sent data structure address information at the image-processing provider, a data-structure-fetch request is sent across the communications medium from the image-processing provider to the kiosk. The data structure is sent to the image-processing provider via a communication medium, and stored in the image-processing provider (Figure 4 and 5, and related discussions on Page 12, Line 18 to page 14, Line 6).

CLAIM 18

Regarding claim 1, Figures 1 and 2 illustrate a kiosk for accepting image-processing orders from a customer for processing at a remote image-processing provider. The kiosk includes a controller (page 18, lines 8-21; page 21 Lines 6-20), a storage device operatively coupled to the controller (320, Figure 3), an image input device (e.g. 140, 150 in Figures 1 and 2) operatively coupled to the controller, wherein the controller transfers digital image information from the image input device to the storage device; a user input device operatively coupled to the controller to produce user-identifier information and order information based on input from the customer. The order information specifies a service to be provided relative to the image information, and wherein the controller associates the user-identifier information and the order information with the digital image information; and a data transmission interface operatively coupled to the controller and to a communication medium. The controller can send the digital image information and its associated user-identifier information and order information to the image-processing provider via a communication medium. In response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, the controller sends data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium (step 515, Figure 5); and in response to receipt of the sent data structure address information at the image-processing provider, the controller sends a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk. (Page 21, Lines 6-20; Figure 3 and related discussions on pages 9-12; Figure 5 and related discussions on pages 13-14)

CLAIM 33

Regarding claim 33, the kiosk illustrated Figures 1 and 2 provides functions for obtaining digital image data from a customer and remotely processing image prints. The instant specification teaches that “undeveloped film canisters or containers (such as advanced film process (AFP) or 35 mm containers) are pushed into openings 138 and 135, whereupon the film is extracted in a dark sealed interior compartment and developed to produce a developed film strip, which is then scanned by a high-resolution digital scanner

to generate digital images.” (Page 8 Line 28 to Page 9, Line 1). A remote film processing system disclosed includes the kiosk, a network (Page 13, Line 1 “communications medium 335 such as the Internet”) that the kiosk is connected to. Means for obtaining the digital image data into the kiosk and locally storing the data, and for transferring the data to a repository system interconnected to the kiosk by the network is exemplified by image input devices 130 and 140, local storage 320. Means, in response to receipt of a first poll request at the kiosk and if a data structure is available, for sending data structure address information corresponding to available data structure from the kiosk via the communications medium(step 515, Figure 5); and in response to receipt of the sent data structure address information at the image-processing provider and sending a data-structure-fetch request across the communications medium to the kiosk are exemplified by web server 330, real image fetcher 450, repository image server 460, and image data handler 319, and described in page 16 Line 3-16.

CLAIM 34

Regarding claim 34, Figures 1 and 2 and related discussions accepting image information, accepting user-identifier information and order information, processing and digitally storing a plurality of images from the image information, and accepting payment at the first business location (the kiosk location). Figure 4 shows that images can be stored at a second business location (101 in Figure 4) across a communications medium. The prints of the stored images can be processed at the second business location and delivered to the processed prints to a customer (step 520, 522 in Figure 5; Page 14 Lines 15-20). In response to receipt of a first poll request and if data structure is available, sending data structure address information corresponding to the available data structure via the communications medium; and in response to receipt of the sent data structure address information at the image-processing provider (step 515, Figure 5), sending a data-structure-fetch request across the communications medium. (Page 21, Lines 6-20; Figure 3 and related discussions on pages 9-12; Figure 5 and related discussions on pages 13-14).

CLAIM 44

Similar to the summary above in relation to claim 18, the kiosk illustrated in Figures 1 and 2 can include a plurality of image input devices.

CLAIM 45

Similar to the summary above in relation to claim 18, Figures 1-5 illustrate a method of collecting images from a plurality of customers into an image-upload kiosk, and transferring images from the kiosk to an image-processing provider, wherein the kiosk includes a data storage device and an input interface for capturing digital images, wherein the data storage device includes computer readable media for storing information representative of the digital images. Figures 1-5 and related discussions disclose that storing image and associated user-identification and order information from each of the plurality of customers into the storage device of the kiosk. The kiosk is connected to a telecommunications channel (between for example the web server 330 and the reel image fetcher 450). The information over the telecommunications channel can be transferred from the kiosk (100 in Figures 4 and 5) to the image-processing provider (101 in Figures 4 and 5), wherein transferring the information over the communications channel includes storing the information to a storage device at the image-processing provider. In response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, data structure address information corresponding to the available data structure can be sent from the kiosk to the image-processing provider via the communications medium. ((step 515, Figure 5; Page 16 Lines 20-29) In response to receipt of the sent data structure address information at the image-processing provider, a data-structure-fetch request can be sent across the communications medium from the image-processing provider to the kiosk (Figures 4 and 5, and related discussions on Page 12, Line 18 to page 14, Line 6).

CLAIM 57

Regarding claim 57, Figures 3 and 4 shows a digital image transfer system including a processor (401), a memory (320), a digital imaging system interface (HTTP, web server 330), a user interface (200), a storage device (320), an event detector (319,

see for example, page 10 Line 21 to Page 11, Line 18), and an image-processing provider (101).

CLAIM 62

Regarding claim 62, “means, coupled to the interface, for storing and later uploading the digital image data across a communications medium” is exemplified by storage 320 and the repository 462 (Figures 3 and 4). “Means, in response to receipt of a first poll request at the kiosk and if the data structure is available, for sending data structure address information corresponding to the available data structure from the interface via the communications medium” is exemplified by the web server 330 and reel image server 450 (Figure 4). “Means, in response to receipt of the sent data structure address information, for sending a data-structure-fetch request across the communications medium to the interface” is exemplified by the web server 330 (Figure 4).

CLAIM 63

Similar to the summary above related to claim 1, Figures 5 and related discussions disclose that image information can be accepted from a customer into the interface of the kiosk (step 510, Figure 5) and stored (step 514); sending inquiring signal from the image-processing provider to the kiosk (step 515); replying the inquiring signal with an image use signal (step 517); transferring the image data to the image-processing provider via a communication medium (step 517); in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, sending data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium; (Page 16 Lines 20-29) and in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk. (Figures 4 and 5, and related discussions on Page 12, Line 18 to page 14, Line 6).

GROUND OF REJECTION PRESENTED FOR REVIEW

- I. WHETHER CLAIMS 1-3, 5, 8, 9, 17, 18-22, 24, 26, 33, 44, 45, 48, 50, AND 56-64 ARE PATENTABLE OVER FREY (US 6,369,908) IN VIEW OF OFOTO AND FURTHER IN VIEW OF ROGAN ET AL. (5,170,466) ("ROGAN").
- II. WHETHER CLAIMS 34-43 ARE PATENTABLE UNDER SECTION 103(A) OVER FREY AND OFOTO.
- III. WHETHER CLAIMS 4, 6, 7, 10-16, 23, 25, 27-32, 46, 47, 49 AND 51-55 ARE PATENTABLE UNDER SECTION 103(A) OVER FREY, ROGAN, OFOTO AND OFFICIAL NOTICE.

ARGUMENT

- I. CLAIMS 1-3, 5, 8, 9, 17, 18-22, 24, 26, 33, 44, 45, 48, 50, AND 56-64 ARE PATENTABLE OVER FREY IN VIEW OF OFOTO AND FURTHER IN VIEW OF ROGAN.

Claims 1-3, 5, 8, 9, 17, 18-22, 24, 26, 33, 44, 45, 48, 50, and 56-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frey (US 6,369,908) in view of Ofoto and further in view of Rogan et al. (5,170,466) ("Rogan").

The Office Action noted that:

Regarding claims 1, 3, 17, 57, 59, 60 and 63, Frey discloses a method of collecting images from a plurality of customers into a kiosk, and transferring images from the kiosk to an image-processing provider, wherein the kiosk includes a computer, a data storage device and an interface for capturing digital images, wherein the data storage device includes computer readable media for storing information representative of the digital images (col. 2, lines 41-56; and col. 3, lines 19-26), the method comprising: accepting image information from a customer into the interface of the kiosk; accepting user-identifier information into the computer, the user identifier information corresponding to the customer (col. 6, lines 9-14);

accepting order information into the computer, the order information specifying a service to be provided relative to the image information (Abstract, Fig. 2-5; and col. 4, lines 4-18); and

storing into a local storage connected to the computer, a digital representation of the image information and associated user identifier information

and order information for each of a plurality of different customers into a data structure (col. 5, lines 19-30; and col. 5, lines 35-40).

Frey does not expressly teach in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, sending data structure address information corresponding to the available data structure from the kiosk to the image processing provider via the communications medium; in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image processing provider to the kiosk; and storing the data structure in the image-processing provider. However, Rogan teaches a high capacity storage and retrieval system for image processing wherein an image packet is transmitted from a modular data storage to an image processing unit in response to a request to retrieve the image packet (col. 7, lines 26-29). At the time of Applicants' invention, it would have been obvious to one of ordinary skill in the art, to modify Frey to include the teachings of Rogan. This combination would enable Frey to provide a batch processing function whereby image data could be transmitted more quickly by transmitting images during periods of low network traffic.

Assuming Frey and Rogan do not expressly teach sending the data structure to the image-processing provider via a communication medium, Ofoto overcomes this ostensible deficiency. Ofoto discloses an online finishing service wherein users are permitted to submit digital images to a developer over a communications network (pp. 1-2). At the time of Applicants' invention, it would have been obvious to one of ordinary skill in the art, to modify Frey and Rogan to include the teachings of Ofoto in that sending the data structure to the image-processing provider via a communication medium would enable the Frey/Rogan method to offer a wider range of services than just photographic emails.

Applicants respectfully traverse the rejection. Here, the references fail to show a number of elements recited in the claims.

First, neither Frey, Ofoto, nor Rogan discloses storing into a local storage connected to the computer, a digital representation of the image information and associated user identifier information and order information for each of a plurality of different customers into a data structure.

Frey shows capturing a picture, sound clip and text of one user and emailing the captured data to an email address. Frey mentions that the kiosk includes a payment device at Col. 6, lines 9-16. However, Frey's system removes images from a removable storage media provided by a user. Any information stored on the removal media is from the user herself. Therefore Frey does not show the element of storing order information for "each of a plurality of different customers into a data structure" in claim 1.

In contrast, the local storage is part of the kiosk whereas the removal media is not part of the kiosk in the instant application. Claim 1 recites that “the kiosk includes a computer, a data storage device and an interface for capturing digital images” The kiosk is used by a plurality of users and is thus used to store “image information and associated user identifier information and order information for each of a plurality of different customers into a data structure” as recited in claim 1. Furthermore, no data structure was written on the removable media and thus no data structure is to be removed.

In one embodiment, the data structure includes
image info;
user identification
order information

for a plurality of users. Additionally, the user’s removable media contains info for only one user. There is also no disclosure in Frey of the data structure containing image, UID and order info. Since this element is missing, Frey cannot render the independent claims obvious.

Additionally, the Office Action acknowledged that Frey did not show, in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, sending data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium; in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk; sending the data structure to the image-processing provider via a communication medium, and storing the data structure in the image-processing provider.

The Office Action asserted that Rogan and Ofoto disclose the missing elements. Applicants traverse the assertion. Rogan relates to a high-capacity high-speed storage/retrieval system for storage and retrieval of document images in digitized data form permits clusters of storage/retrieval modules (SRM's) to store and exchange digital data via local area networks within the cluster of SMR's. Rogan's Col. 7, lines 26-29 discloses that the disk controller board 10dc receives the image packet and prepares it for transmittal to the disk drive location which was defined by the Storage Processor 10p.

Data is then transferred from the disk controller board 10dc to the disks 20. The image packet is stored on the disk until the SRM module 10 receives a request to retrieve the selected image packet or group of packets. Image packets are retrieved through a read and transfer of the packet data. The image data which is stored on the disk is not altered or erased.

However, Rogan still does not disclose the claimed specifics, namely in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, sending data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium; in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk; sending the data structure to the image-processing provider via a communication medium, and storing the data structure in the image-processing provider.

As to the dependent claims, these claims overcome the Section 103 rejection because they depend from allowable independent claims. Moreover, Frey does not teach “removing the data structure from the local storage after the data structure has been sent to the image-processing provider” in claim 2 because Frey’s system only removes images from a removable storage media provided by a user. It neither removes data structure anywhere nor teaches removal of data structure from a local storage.

Further, Applicants note that the MPEP Section 2143.01 - Suggestion or Motivation To Modify the References – requires that a statement that modifications of the prior art to meet the claimed invention would have been “ ‘well within the ordinary skill of the art at the time the claimed invention was made’ ” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Such is not the case here. Applicants note that no motivation or suggestion, either in the cited art reference or in the knowledge generally available to one of ordinary skill in the art, has been cited by the Examiner to modify the Frey reference so as to produce the claimed invention.

The Office Action then noted that “assuming Frey and Rogan do not expressly teach sending the data structure to the image-processing provider via a communication medium, Ofoto overcomes this ostensible deficiency.”

Applicants have carefully reviewed the Ofoto PR Newswire dated Dec. 13, 1999, and could not locate any discussion of sending a data structure having a digital representation of the image information and associated user identifier information and order information for each of a plurality of different customers. At best, Ofoto simply shows that a user can order only the images she likes. However, this is significantly different from storing order information for each of a plurality of different customers in a marker file.

Additionally, Ofoto fails to show other missing elements, namely in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, sending data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium; in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk; sending the data structure to the image-processing provider via a communication medium, and storing the data structure in the image-processing provider. As noted above, the Frey reference fails to teach or suggest collecting images from a plurality of customers into a kiosk, and transferring images from the kiosk to an image-processing provider. The PR reference news article fails to teach or suggest collecting images from a plurality of customers into a kiosk, and transferring images from the kiosk to an image-processing provider.

Further, Applicants fail to identify any motivation to modify the reference teaching so as provide transferring images from the kiosk to an image-processing provider as presently claimed. In fact, the Frey reference teaches away from Applicant's invention as one skilled in the art would have been generally discouraged from transferring images from the kiosk to an image-processing provider since Frey expressly teaches sending data one at a time to an email address.

Applicants point out that the Examiner bears the initial burden of factually establishing and supporting any *prima facie* conclusion of obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976); M.P.E.P. § 2142. If the Examiner does not produce a *prima facie* case, the Applicant is under no obligation to submit evidence of nonobviousness. *Id.* In the instant case, the Examiner has not pointed to any evidence in Frey, or how knowledge of those skilled in the art, provide a suggestion or motivation to modify the reference teaching so as to produce the claimed invention. See *In re Zurko*, 59 U.S.P.Q.2d 1693 (Fed. Cir. 2001) ([I]n a determination of patentability the Board cannot simply reach conclusions based on its understanding or experience - or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings).

Based on the foregoing, Applicants submit that Frey, Ofoto and Rogan, singly or in combination, cannot render unpatentable claims 1-3, 5, 8-9, 17-22, 24, 26, 44-45, 48, 50, 56-61 and 63-64. Withdrawal of the rejection is requested.

II. CLAIMS 34-43 ARE PATENTABLE UNDER SECTION 103(A) OVER FREY AND OFOTO

The Office Action rejected these claims as follows:

Regarding claims 34, 35, 36, 40 and 41, Frey discloses a computer-implemented method of business comprising:

- accepting image information at a first business location (Abstract);
- accepting user-identifier information and order information associated with the image information at the first business location (Abstract; col. 3, lines 20-25; col. 4, lines 5-30; and col. 6, lines 9-15);
- processing and digitally storing a plurality of images from the image information at the first business location (col. 3, lines 19-26 and 43-67);
- accepting payment at the first business location (col. 6, lines 9-15);
- transferring the digital stored images to a second business location across a communications medium (Abstract; and col. 5, lines 44-57); and
- in response to receipt of a first poll request and if data structure is available,³ sending data structure address information corresponding to the available data structure via the communications medium; and in response to receipt of the sent data structure address information at the image processing provider, sending a data structure fetch request across the communications medium.

Frey does not expressly teach storing the digital images at the second business location, processing prints of the stored images at the second business location and delivering the processed prints to a customer. However, Ofoto teaches an online service for developing digital photos including the steps of storing a plurality of customer images at the service provider Website, developing at least one customer image and delivering the at least one developed image to a customer. At the time of Applicant's invention, it would have been obvious to one of ordinary skill in the art, to modify Frey to include storing the digital images at the second business location, processing prints of the stored images at the second business location and delivering the processed prints to a customer as taught by Ofoto. This combination would allow users to order prints from a professional developing service thereby allowing the kiosk to offer a wide range quality photographic products.

First, these claims depend from allowable independent claims and therefore are allowable. Moreover, Applicants

Regarding claim 37, Frey discloses accepting input from the customer specifying a modification to be made to at least one image and displaying a modified image resulting from the modification (col. 4, lines 5-32).

Regarding claims 38 and 39, Frey teaches accepting a credit-card payment from the customer into the kiosk (col. 6, lines 9-15).

Regarding claim 42, Frey teaches all the limitations discussed under claim 34. Frey further teaches displaying captured images to the user at the first location and accepting input from the customer specifying a modification to be made to at least one image, and displaying a modified image resulting from the modification, and accepting a payment from the customer into the kiosk (col. 4, lines 5-32; and col. 6, lines 9-15). Frey does not expressly teach accepting input from a customer specifying at least one delivery address for processed prints. However, Ofoto teaches an online developing service that delivers prints of pictures taken by a digital camera. At the time of Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify Frey to include accepting input from a customer specifying at least one delivery address for processed prints. This modification would permit Frey's photographic kiosk to offer customers a wide range of high quality photography products.

Regarding claim 43, Frey discloses transferring a data structure that includes image data of a plurality of customers across an Internet connection within a single Internet session (col. 5, lines 34-39).

III. CLAIMS 4, 6, 7, 10-16, 23, 25, 27-32, 46, 47, 49 AND 51-55 ARE PATENTABLE UNDER SECTION 103(A) OVER FREY, ROGAN, OFOTO AND OFFICIAL NOTICE.

Claims 4, 6, 7, 10-16, 23, 25, 27-32, 46, 47, 49 and 51-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frey in view of Rogan, Ofoto and Official Notice. The Office Action noted that Frey, Rogan and the PR Newswire article do not expressly disclose accepting credit-card payment, and storing into the local storage connected to the computer, a digital representation of the credit-card information. However, the Examiner takes Official Notice that storing credit card payment information, as by an electronic wallet, for expediting e-commerce transactions is old and well known. At the time of Applicant's invention, it would have been obvious to one of ordinary skill in the art, to modify Frey, Rogan and the PR Newswire article to include accepting credit-card payment, and storing into the local storage connected to the computer, a digital representation of the credit-card information. Implementing this combination would allow users to pay for their orders automatically. Appellants respectfully disagree.

First, Appellants note that these claims depend on allowable claim 1 and thus are allowable. Moreover, Applicants note that no motivation or suggestion, either in the cited art reference or in the knowledge generally available to one of ordinary skill in the art, has been cited by the Examiner to modify the Frey reference so as to produce the claimed invention.

As noted above, the Frey reference fails to teach or suggest collecting images from a plurality of customers into a kiosk, and transferring images from the kiosk to an image-processing provider. The PR reference news article fails to teach or suggest collecting images from a plurality of customers into a kiosk, and transferring images from the kiosk to an image-processing provider.

Further, Applicants fail to identify any motivation to modify the reference teaching so as provide transferring images from the kiosk to an image-processing provider as presently claimed. In fact, the Frey reference teaches away from Applicant's invention as one skilled in the art would have been generally discouraged from transferring images from the kiosk to an image-processing provider since Frey expressly teaches sending data one at a time to an email address.

Applicants point out that the Examiner bears the initial burden of factually establishing and supporting any *prima facie* conclusion of obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976); M.P.E.P. § 2142. If the Examiner does not produce a *prima facie* case, the Applicant is under no obligation to submit evidence of nonobviousness. *Id.* In the instant case, the Examiner has not pointed to any evidence in Frey, or how knowledge of those skilled in the art, provide a suggestion or motivation to modify the reference teaching so as to produce the claimed invention. See *In re Zurko*, 59 U.S.P.Q.2d 1693 (Fed. Cir. 2001) ([I]n a determination of patentability the Board cannot simply reach conclusions based on its understanding or experience - or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings).

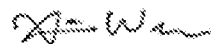
Under *Vaeck*, absent any evidence of a cited suggestion or reasonable motivation in the Andreiko et al. reference, or knowledge of those skilled in the art, for interpolating positional differences to produce successive digital data sets of tooth arrangements, *prima facie* obviousness of the claims has not been established. As such, it is respectfully requested that the § 103(a) rejection of claims, 4, 6, 7, 10-16, 23, 25, 32, 46, 47, 49 and 51-55 be withdrawn and the claims be allowed.

CONCLUSION

Applicants believe that the above discussion is fully responsive to all grounds of rejection set for the in the Office Action.

If for any reasons the Examiner believes a telephone conference would in any way expedite resolution of the issues raised in this appeal, the Examiner is invited to telephone the undersigned at 650-610-3522.

Respectfully submitted,



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CLAIMS APPENDIX

1. A method of collecting images from a plurality of customers into a kiosk, and transferring images from the kiosk to an image-processing provider, wherein the kiosk includes a computer, a data storage device and an interface for capturing digital images, wherein the data storage device includes computer readable media for storing information representative of the digital images, the method comprising:

- accepting image information from a customer into the interface of the kiosk;
- accepting user-identifier information into the computer, the user-identifier information corresponding to the customer;
- accepting order information into the computer, the order information specifying a service to be provided relative to the image information;
- storing into a local storage connected to the computer, a digital representation of the image information and associated user identifier information and order information for each of a plurality of different customers into a data structure;
- in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, sending data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium;
- in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk;
- sending the data structure to the image-processing provider via a communication medium, and
- storing the data structure in the image-processing provider.

2. The method of claim 1 further comprising:

- removing the data structure from the local storage after the data structure has been sent to the image-processing provider.

3. The method of claim 1, wherein the data structure includes a reel-control data structure and a plurality of roll data structures[, and wherein the method further comprises:

in response to receipt of a first poll request at the kiosk and if the data structure is available, sending data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium;

in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk;

sending the data structure from the kiosk to the image-processing provider via the communications medium; and

storing the data structure in the image-processing provider].

4. The method of claim 1, further comprising:

accepting credit-card payment information into the computer; and

storing into the local storage connected to the computer, a digital representation of the credit-card information associated with the user identifier information .

5. The method of claim 1, further comprising:

displaying to the customer at least one image from the image information.

6. The method of claim 4, further comprising:

displaying to the customer a plurality of thumbnail images from the image information.

7. The method of claim 1, further comprising:

printing a receipt describing the order and including a printout of a plurality of thumbnail images from the image information.

8. The method of claim 1, wherein the order information further includes a modification to be made to at least one image from the image information.

9. The method of claim 1, wherein the order information further includes a plurality of delivery addresses to which at least one print from the image information is to be delivered.
10. The method of claim 1, wherein the accepting image information includes optical scanning of film images and generating digital representations of the film images.
11. The method of claim 1, wherein the accepting image information includes transferring image data directly from a digital-image storage medium.
12. The method of claim 11, wherein the accepting image information includes reading image data directly from a memory stick into the kiosk.
13. The method of claim 11, wherein the accepting image information includes reading image data directly from a rotatable storage disk into the kiosk.
14. The method of claim 1, wherein the accepting image information includes transferring image data into a universal serial bus (USB) port of the kiosk.
15. The method of claim 1, wherein the accepting image information includes transferring image data into a wireless receiver port of the kiosk.
16. The method of claim 1, wherein the accepting image information includes:
accepting a container of undeveloped film into the kiosk;
processing the undeveloped film to generate developed film in the kiosk; and
optically scanning the developed film and generating at least one digital representation of the developed film.
17. A computer-usable information medium having a computer program stored thereon for causing a suitably programmed system to transfer digital images between a

source terminal and a repository system interconnected by a communications medium by performing the method of claim 1 when such program is executed on the system.

18. A kiosk for accepting image-processing orders from a customer for processing at a remote image-processing provider, the kiosk comprising:

- a controller;
- a storage device operatively coupled to the controller;
- an image input device operatively coupled to the controller, wherein the controller transfers digital image information from the image input device to the storage device;
- a user input device operatively coupled to the controller to produce user-identifier information and order information based on input from the customer, wherein the order information specifies a service to be provided relative to the image information, and wherein the controller associates the user-identifier information and the order information with the digital image information; and
- a data transmission interface operatively coupled to the controller and to a communication medium, wherein the controller sends the digital image information and its associated user-identifier information and order information to the image-processing provider via a communication medium, wherein in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, the controller sends data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium; and in response to receipt of the sent data structure address information at the image-processing provider, the controller sends a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk..

19. The kiosk according to claim 18, further comprising:
a credit-card information input device operatively coupled to the controller.

20. The kiosk according to claim 18, further comprising:
a display that shows to the customer at least one image from the image information.

21. The kiosk according to claim 20, wherein the user input device further accepts input from the customer to specify a modification to be made to at least one image from the image information, and wherein the display provides a visual indication of the image as modified by the modification.
22. The kiosk according to claim 18, further comprising:
a display that shows to the customer a plurality of thumbnail images from the image information.
23. The kiosk according to claim 22, further comprising:
a printer that prints a receipt that describes the order and includes a printout of the plurality of thumbnail images from the image information.
24. The kiosk according to claim 18, wherein the user input device further accepts order information indicating a plurality of delivery addresses to which at least one print from the image information is to be delivered.
25. The kiosk according to claim 18, wherein the image-input device includes an optical scanner of film images that generates digital representations of the film images.
26. The kiosk according to claim 18, wherein the image input device includes a digital camera interface that transfers image data directly from a digital camera.
27. The kiosk according to claim 18, wherein the image input device includes a storage medium interface that transfers image data directly from a storage medium.
28. The kiosk according to claim 27, wherein the storage medium interface includes a memory stick port into the kiosk.
29. The kiosk according to claim 27, wherein the storage medium interface includes a disk interface that reads image data directly from a rotatable storage disk into the kiosk.

30. The kiosk according to claim 27, wherein the storage medium interface includes a universal serial bus (USB) port into the kiosk.

31. The kiosk according to claim 27, wherein the storage medium interface includes a wireless receiver port into the kiosk.

32. The kiosk according to claim 18, wherein the image input device includes:
a mechanical port that accepts a container of undeveloped film into the kiosk;
a film processor coupled to the mechanical port that processes the undeveloped film to generate developed film in the kiosk; and
an optical scanner that scans the developed film and generates at least one digital representation of the developed film.

33. A remote film processing system for obtaining digital image data from a customer and remotely processing image prints, the system comprising:

- a network;

- a kiosk coupled to the network; and

- means for obtaining the digital image data into the kiosk and locally storing the data, and for transferring the data to a repository system interconnected to the kiosk by the network

- means, in response to receipt of a first poll request at the kiosk and if a data structure is available, for sending data structure address information corresponding to available data structure from the kiosk via the communications medium; and

- in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium to the kiosk.

34. A computer-implemented method of business comprising:

- accepting image information at a first business location;

accepting user-identifier information and order information associated with the image information at the first business location;
processing and digitally storing a plurality of images from the image information at the first business location;
accepting payment at the first business location;
transferring the digital stored images to a second business location across a communications medium;
storing the digital images at the second business location;
processing prints of the stored images at the second business location;
delivering the processed prints to a customer;
in response to receipt of a first poll request and if data structure is available, sending data structure address information corresponding to the available data structure via the communications medium; and
in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium.

35. The method according to claim 34, wherein the first business location includes an automated kiosk.

36. The method according to claim 35, further comprising:
displaying the images to the customer at the first business location.

37. The method according to claim 36, further comprising:
accepting input from the customer specifying a modification to be made to at least one image; and
displaying a modified image resulting from the modification.

38. The method according to claim 34, further comprising:
accepting a payment from the customer into the kiosk.

39. The method according to claim 34, further comprising:
accepting a credit-card payment from the customer into the kiosk.
40. The method according to claim 34, further comprising:
accepting input from the customer specifying a delivery address for the processed prints.
41. The method according to claim 34, further comprising:
accepting input from the customer specifying a plurality of delivery addresses for the
processed prints.
42. The method according to claim 34, further comprising:
accepting input from the customer specifying at least one delivery address for the
processed prints;
displaying the images to the customer at the first business location;
accepting input from the customer specifying a modification to be made to at least
one image;
displaying a modified image resulting from the modification; and
accepting a payment from the customer into the kiosk.
43. The method according to claim 34, further comprising:
transferring a data structure that includes image data of a plurality of customers across an
Internet connection within a single Internet session.
44. An automated kiosk for accepting image-processing orders from a customer for
processing at a remote image-processing provider, the kiosk comprising:
a controller;
a storage device operatively coupled to the controller;
a plurality of image input devices operatively coupled to the controller, each input
device accepting a different type of image information, wherein the controller transfers
digital image information from the image input devices to the storage device;

a credit-card reader operatively coupled to the controller, the reader operable to read data of a credit card;

a user input device operatively coupled to the controller to produce user-identifier information and order information based on input from the customer, wherein the order information specifies a service to be provided relative to the image information, and wherein the controller associates the user-identifier information and the order information with the digital image information;

a display that displays the digital image information, user-identifier information, and order information; and

a data transmission interface operatively coupled to the controller and to a communication medium, wherein the controller sends the digital image information and its associated user-identifier information and order information to the image-processing provider via a communication medium, wherein in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, the controller sends data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium; and in response to receipt of the sent data structure address information at the image-processing provider, the controller sends a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk.

45. A method of collecting images from a plurality of customers into an image-upload kiosk, and transferring images from the kiosk to an image-processing provider, wherein the kiosk includes a data storage device and an input interface for capturing digital images, wherein the data storage device includes computer readable media for storing information representative of the digital images, the method comprising:

storing image and associated user-identification and order information from each of the plurality of customers into the storage device of the kiosk;

connecting the kiosk to a telecommunications channel; and
transferring the information over the telecommunications channel from the kiosk to the image-processing provider, wherein transferring the information over the

communications channel includes storing the information to a storage device at the image-processing provider;

in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, sending data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium; and

in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk.

46. The method according to claim 45, wherein the image-upload kiosk includes a receptacle, wherein storing image and associated user-identification and order information includes:

removing a data-storage medium from a digital imaging system; and
inserting the data-storage medium in the receptacle.

47. The method according to claim 45, wherein the image upload kiosk includes a receptacle and a button, wherein storing image and associated user-identification and order information includes:

removing a data-storage medium from a digital imaging system;
inserting the data-storage medium in the receptacle; and
depressing the button.

48. The method according to claim 45, wherein the telecommunications channel includes a telephone network.

49. The method according to claim 48, wherein the image upload kiosk includes a receptacle, wherein storing image and associated user-identification and order information includes:

removing a data-storage medium from a digital imaging system;

inserting the data-storage medium in the receptacle; and
wherein transferring the information over the communications channel further includes establishing a telephone connection between the image upload device and the image-processing provider.

50. The method according to claim 45, wherein the telecommunications channel includes a cable network.

51. The method according to claim 50, wherein the image upload kiosk includes a receptacle, wherein storing image and associated user-identification and order information includes:

removing a data-storage medium from a digital imaging system;
inserting the data-storage medium in the receptacle; and
wherein transferring the information over the communications channel further includes establishing a connection through the cable network between the image upload device and the image-processing provider.

52. The method according to claim 45, wherein the image upload kiosk includes a cradle having a data transfer interface and wherein storing image and associated user-identification and order information includes placing a digital imaging system in the cradle.

53. The method according to claim 52, wherein the digital imaging system includes a rechargeable electrical-energy source and wherein the cradle includes a battery-recharge circuit, wherein connecting the data storage device to the image upload device includes recharging the rechargeable electrical-energy source.

54. The method according to claim 45, wherein the image upload kiosk includes a cradle and a button, wherein storing image and associated user-identification and order information includes placing the digital imaging system in the cradle and depressing the button.

55. The method according to claim 54, wherein the digital imaging system includes a rechargeable electrical-energy source and wherein the cradle includes a battery recharge circuit, wherein connecting the data storage device to the image upload device includes recharging the rechargeable electrical-energy source.

56. An article of manufacture comprising a computer readable medium having instructions thereon, wherein the instructions, when executed in a computer, create a system for executing the method of claim 45.

57. A digital image transfer system, comprising:

- a processor;
- memory connected to the processor;
- a digital imaging system interface connected to the processor, wherein the digital imaging system interface is capable of receiving information representative of digital images from a digital imaging system;
- a user interface connected to the processor, the user interface capable of inputting user-identification, order, and payment information from each one of a plurality of customers;
- a storage device coupled to the processor, that stores the digital images and the associated user-identification and order information;
- an event detector coupled to the processor; and
- an image-processing provider interface connected to the processor, wherein the image-processing provider interface is capable of connecting to a communications medium in order to transfer digital images from the digital imaging system interface and the image information and the user-identification and order information from the user interface through the communications medium to an image-processing provider in response to an event detected by the event detector, wherein in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, the processor sends data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications

medium; and in response to receipt of the sent data structure address information at the image-processing provider, the processor sends a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk.

58. The system according to claim 57, wherein the event detector includes a timer and wherein the event is a time-based event.

59. The system according to claim 57, wherein the event detector includes an Internet connection and wherein the event is a poll message from the image-processing provider.

60. The system according to claim 57, wherein the event detector includes a storage space detector and wherein the event is a predetermined amount of image data being stored in the storage device.

61. The system according to claim 57, wherein the user interface further includes an image display that displays digital images to the customer.

62. A digital image upload apparatus comprising:
a digital data interface for receiving digital image data, and
means, coupled to the interface, for storing and later uploading the digital image data across a communications medium;
means, in response to receipt of a first poll request at the kiosk and if the data structure is available, for sending data structure address information corresponding to the available data structure from the interface via the communications medium; and
means, in response to receipt of the sent data structure address information, for sending a data-structure-fetch request across the communications medium to the interface.

63. A method of collecting images and order information by an image-processing provider from at least one image kiosk, wherein the image kiosk includes a computer, a data storage device and an interface for capturing digital images, wherein the data storage

device includes computer readable media for storing information representative of the digital images, the method comprising:

- accepting image information from a customer into the interface of the kiosk;
- storing the image information into a local storage;
- sending inquiring signal from the image-processing provider to the kiosk;
- replying the inquiring signal with an image use signal;
- transferring the image data to the image-processing provider via a communication medium;

- in response to receipt of a first poll request at the kiosk and upon detecting the availability of the data structure, sending data structure address information corresponding to the available data structure from the kiosk to the image-processing provider via the communications medium; and

- in response to receipt of the sent data structure address information at the image-processing provider, sending a data-structure-fetch request across the communications medium from the image-processing provider to the kiosk.

64. The method of claim 63, further comprising:

- removing the image information from the local storage after the image-data transfer.

EVIDENCE APPENDIX

NONE

RELATED PROCEEDINGS APPENDIX

NONE